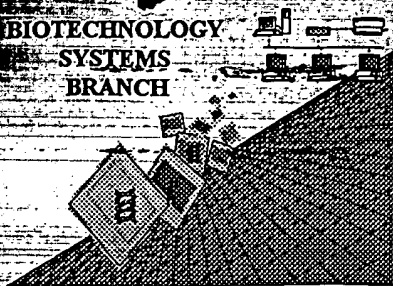


RAW SEQUENCE LISTING
ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/666,837
Source: O/PF
Date Processed by STIC: 9/29/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR FURTHER INFORMATION, PLEASE TELEPHONE MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000
 TIME: 13:13:20

Input Set : A:\2314-206.app
 Output Set: N:\CRF3\09292000\I666837.raw

3 <110> APPLICANT: Cornell-Bell, Ann H.
 4 Pemberton, Karen E.
 5 Temple Jr., Davis L.
 6 Layer, Richard T.
 7 McCabe, R. Tyler
 8 Jones, Robert M.
 9 Cognetix, Inc.
 11 <120> TITLE OF INVENTION: Uses of Kappa-Conotoxin PVIIA
 13 <130> FILE REFERENCE: Kappa-PVIIA
 15 <140> CURRENT APPLICATION NUMBER: US/09/666,837
 16 <141> CURRENT FILING DATE: 2000-09-21
 18 <150> PRIOR APPLICATION NUMBER: US 60/219,438
 19 <151> PRIOR FILING DATE: 2000-07-20
 21 <150> PRIOR APPLICATION NUMBER: US 60/155,135
 22 <151> PRIOR FILING DATE: 1999-09-22
 24 <160> NUMBER OF SEQ ID NOS: 25
 26 <170> SOFTWARE: PatentIn Ver. 2.0
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 27
 30 <212> TYPE: PRT
 31 <213> ORGANISM: Conus purpurascens
 33 <220> FEATURE:
 34 <221> NAME/KEY: PEPTIDE
 35 <222> LOCATION: (1)..(27)
 36 <223> OTHER INFORMATION: Xaa at residue 2, 7, 18, 19, 22 and 25 may be Arg,
 37 homoarginine, ornithine, Lys, N-methyl-Lys,
 38 N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, any
 39 synthetic basic amino acid, His or halo-His; Xaa
 W--> 40 at residue
 42 <220> FEATURE:
 43 <221> NAME/KEY: PEPTIDE
 44 <222> LOCATION: (1)..(27)
 45 <223> OTHER INFORMATION: 4 may be Pro or Hyp; Xaa at residue 9 and 23 may
 46 be Phe,Tyr, meta-Tyr, ortho-Tyr, nor-Tyr,
 47 mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
 48 O-phospho-Tyr, nitro-Tyr, Trp (D or L), neo-Trp,
 50 <220> FEATURE:
 51 <221> NAME/KEY: PEPTIDE
 52 <222> LOCATION: (1)..(27)
 53 <223> OTHER INFORMATION: halo-Trp (D or L) or any synthetic aromatic amino
 54 acid; Xaa at residue 11 is His or halo-His
 56 <400> SEQUENCE: 1
 57 Cys Xaa Ile Xaa Asn Gln Xaa Cys Xaa Gln Xaa Leu Asp Asp Cys Cys
 58 1 / / 5 / / 10 / / 15
 60 Ser Xaa Xaa Cys Asn Xaa Xaa Asn Xaa Cys Val
 61 20 25
 64 <210> SEQ ID NO: 2

Does Not Comply
 Corrected Diskette Needed

move up - per sequence Rules,
 maximum of four lines
 for <223> section

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000
TIME: 13:13:20

Input Set : A:\2314-206.app
Output Set: N:\CRF3\09292000\I666837.raw

65 <211> LENGTH: 27
66 <212> TYPE: PRT
67 <213> ORGANISM: Conus purpurascens
69 <220> FEATURE:
70 <221> NAME/KEY: PEPTIDE
71 <222> LOCATION: (1)..(27)
72 <223> OTHER INFORMATION: Xaa is Hyp
74 <400> SEQUENCE: 2
OK 75 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
76 1 5 10 15
78 Ser Ala Lys Cys Asn Arg Phe Asn Lys Cys Val
79 20 25
82 <210> SEQ ID NO: 3
83 <211> LENGTH: 27
84 <212> TYPE: PRT
85 <213> ORGANISM: Conus purpurascens
87 <220> FEATURE:
88 <221> NAME/KEY: PEPTIDE
89 <222> LOCATION: (1)..(27)
90 <223> OTHER INFORMATION: Xaa is Hyp
92 <400> SEQUENCE: 3
OK 93 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
94 1 5 10 15
96 Ser Arg Lys Cys Asn Ala Phe Asn Lys Cys Val
97 20 25
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 27
102 <212> TYPE: PRT
103 <213> ORGANISM: Conus purpurascens
105 <220> FEATURE:
106 <221> NAME/KEY: PEPTIDE
107 <222> LOCATION: (1)..(27)
108 <223> OTHER INFORMATION: Xaa is Hyp
110 <400> SEQUENCE: 4
OK 111 Cys Arg Ala Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
112 1 5 10 15
114 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
115 20 25
118 <210> SEQ ID NO: 5
119 <211> LENGTH: 27
120 <212> TYPE: PRT
121 <213> ORGANISM: Conus purpurascens
123 <220> FEATURE:
124 <221> NAME/KEY: PEPTIDE
125 <222> LOCATION: (1)..(27)
126 <223> OTHER INFORMATION: Xaa is Hyp
128 <400> SEQUENCE: 5
OK 129 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
130 1 5 10 15

RAW SEQUENCE LISTING

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

132 Ser Arg Ala Cys Asn Arg Phe Asn Lys Cys Val
133 20 25
136 <210> SEQ ID NO: 6
137 <211> LENGTH: 27
138 <212> TYPE: PRT
139 <213> ORGANISM: Conus purpurascens
141 <220> FEATURE:
142 <221> NAME/KEY: PEPTIDE
143 <222> LOCATION: (1)..(27)
144 <223> OTHER INFORMATION: Xaa is Hyp
146 <400> SEQUENCE: 6
X- 147 Cys Ala Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
148 1 5 10 15
150 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
151 20 25
154 <210> SEQ ID NO: 7
155 <211> LENGTH: 27
156 <212> TYPE: PRT
157 <213> ORGANISM: Conus purpurascens
159 <220> FEATURE:
160 <221> NAME/KEY: PEPTIDE
161 <222> LOCATION: (1)..(27)
163 <400> SEQUENCE: 7
W--> 164 Cys Arg Ile Xaa Asn Gln Lys Cys Ala Gln His Leu Asp Asp Cys Cys
165 1 5 10 15
167 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
168 20 25
171 <210> SEQ ID NO: 8
172 <211> LENGTH: 27
173 <212> TYPE: PRT
174 <213> ORGANISM: Conus purpurascens
176 <220> FEATURE:
177 <221> NAME/KEY: PEPTIDE
178 <222> LOCATION: (1)..(27)
179 <223> OTHER INFORMATION: Xaa is Hyp
181 <400> SEQUENCE: 8
X- 182 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
183 1 5 10 15
185 Ser Arg Lys Cys Asn Arg Phe Asn Ala Cys Val
186 20 25
189 <210> SEQ ID NO: 9
190 <211> LENGTH: 27
191 <212> TYPE: PRT
192 <213> ORGANISM: Conus purpurascens
194 <220> FEATURE:
195 <221> NAME/KEY: PEPTIDE
196 <222> LOCATION: (1)..(27)
197 <223> OTHER INFORMATION: Xaa is Hyp
199 <400> SEQUENCE: 9

what does Xaa represent?

RAW SEQUENCE LISTING

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

OK> 200 Cys Lys Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
201 1 5 10 15
203 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
204 20 25
207 <210> SEQ ID NO: 10
208 <211> LENGTH: 27
209 <212> TYPE: PRT
210 <213> ORGANISM: Conus purpurascens
212 <220> FEATURE:
213 <221> NAME/KEY: PEPTIDE
214 <222> LOCATION: (1)..(27)
215 <223> OTHER INFORMATION: Xaa is Hyp
217 <400> SEQUENCE: 10
OK> 218 Cys Arg Ile Xaa Asn Gln Ala Cys Phe Gln His Leu Asp Asp Cys Cys
219 1 5 10 15
221 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
222 20 25
225 <210> SEQ ID NO: 11
226 <211> LENGTH: 27
227 <212> TYPE: PRT
228 <213> ORGANISM: Conus purpurascens
230 <220> FEATURE:
231 <221> NAME/KEY: PEPTIDE
232 <222> LOCATION: (1)..(27)
233 <223> OTHER INFORMATION: Xaa is Hyp
235 <400> SEQUENCE: 11
OK> 236 Cys Arg Ile Xaa Asn Gln Lys Cys Met Gln His Leu Asp Asp Cys Cys
237 1 5 10 15
239 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
240 20 25
243 <210> SEQ ID NO: 12
244 <211> LENGTH: 27
245 <212> TYPE: PRT
246 <213> ORGANISM: Conus purpurascens
248 <220> FEATURE:
249 <221> NAME/KEY: PEPTIDE
250 <222> LOCATION: (1)..(27)
251 <223> OTHER INFORMATION: Xaa is Hyp
253 <400> SEQUENCE: 12
OK> 254 Cys Arg Ile Xaa Asn Gln Lys Cys Tyr Gln His Leu Asp Asp Cys Cys
255 1 5 10 15
257 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
258 20 25
261 <210> SEQ ID NO: 13
262 <211> LENGTH: 27
263 <212> TYPE: PRT
264 <213> ORGANISM: Conus purpurascens
266 <220> FEATURE:
267 <221> NAME/KEY: PEPTIDE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/666,837

DATE: 09/29/2000

TIME: 13:13:20

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

268 <222> LOCATION: (1)..(27)
 269 <223> OTHER INFORMATION: Xaa is Hyp
 271 <400> SEQUENCE: 13
 OK--> 272 Cys Gln Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Asp Cys Cys
 273 1 5 10 15
 275 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
 276 20 25
 279 <210> SEQ ID NO: 14
 280 <211> LENGTH: 27
 281 <212> TYPE: PRT
 282 <213> ORGANISM: Conus purpurascens
 284 <220> FEATURE:
 285 <221> NAME/KEY: PEPTIDE
 286 <222> LOCATION: (1)..(27)
 287 <223> OTHER INFORMATION: Xaa is Hyp
 289 <400> SEQUENCE: 14
 OK--> 290 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln Ala Leu Asp Asp Cys Cys
 291 1 5 10 15
 293 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
 294 20 25
 297 <210> SEQ ID NO: 15
 298 <211> LENGTH: 27
 299 <212> TYPE: PRT
 300 <213> ORGANISM: Conus purpurascens
 302 <220> FEATURE:
 303 <221> NAME/KEY: PEPTIDE
 304 <222> LOCATION: (1)..(27)
 306 <400> SEQUENCE: 15
 W--> 307 Cys Arg Ile Xaa Asn Gln Lys Cys Phe Gln His Leu Asp Ala Cys Cys
 308 1 5 10 15
 310 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
 311 20 25
 314 <210> SEQ ID NO: 16
 315 <211> LENGTH: 27
 316 <212> TYPE: PRT
 317 <213> ORGANISM: Conus purpurascens
 319 <220> FEATURE:
 320 <221> NAME/KEY: PEPTIDE
 321 <222> LOCATION: (1)..(27)
 322 <223> OTHER INFORMATION: Xaa is Hyp
 324 <400> SEQUENCE: 16
 OK--> 325 Cys Arg Ile Xaa Asn Ala Lys Cys Phe Gln His Leu Asp Asp Cys Cys
 326 1 5 10 15
 328 Ser Arg Lys Cys Asn Arg Phe Asn Lys Cys Val
 329 20 25
 332 <210> SEQ ID NO: 17
 333 <211> LENGTH: 27
 334 <212> TYPE: PRT
 335 <213> ORGANISM: Conus purpurascens

what does Xaa represent?

FYI
↓

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 09/29/2000

PATENT APPLICATION: US/09/666,837

TIME: 13:13:21

Input Set : A:\2314-206.app

Output Set: N:\CRF3\09292000\I666837.raw

L:15 M:270 C: Current Application Number differs, Replaced Application Number
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:40 M:259 W: Field exceeds allowed number of lines, <223> Other Information:
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:164 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:7
L:164 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:307 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:307 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15
L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:343 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:396 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:20
L:396 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:20
L:414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25